

TWO NEW SPECIES OF GYMNOSPORANGIUM FROM ASIA

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*With two text figures***Gymnosporangium magnum** Crowell, sp. nov. (Fig. 1).

Spermogonia foliicolae, subepidermalia. Aecidia hypophylla, cupuliformia, tumoribus subglobosis insidentia; cellulae peridii rhomboideae, hyalinae, pariete interiore marginibusque subspinulosae, $22.5-30.6 \times 50.0-64.4 \mu$, plus minusve $24.3 \times 59.2 \mu$; aecidiosporae globosae, pallide brunneae, verruculosae, $24.2-29.0 \times 30-32 \mu$, plus minusve $26.1 \times 29.8 \mu$.

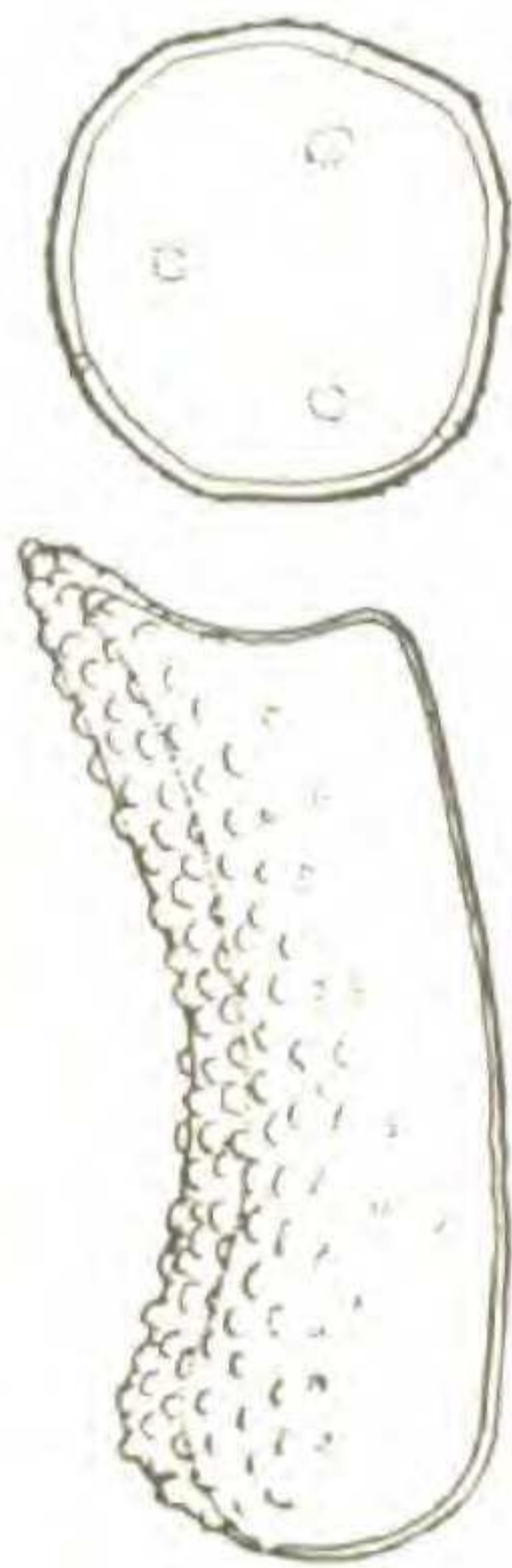


FIG. 1.

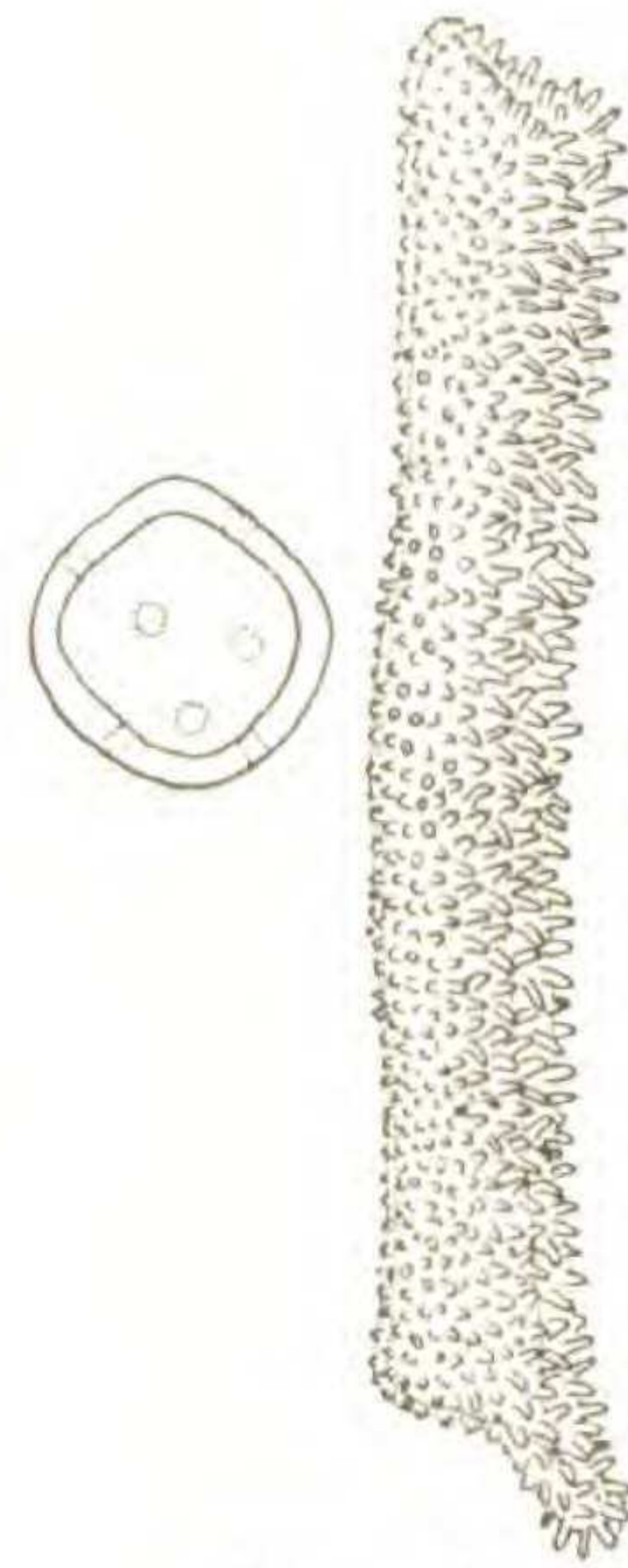


FIG. 2.

FIGURE 1. GYMNOSPORANGIUM MAGNUM Crowell.—FIGURE 2. GYM-
NOSPORANGIUM LEVE Crowell.—AECIOSPORES AND PERIDIAL CELLS.

Hab. in foliis *Crataegi* sp. in China centrali. Ex Herb. G. Lagerheim, Botaniska Andelning Riksmuseet, Stockholm, Sweden (Smith, no. 917).

The specific name is suggested by the unusual size of the aeciospores, a feature in which they are surpassed by *G. juniperinum* (L.) Mart. only.

Gymnosporangium leve Crowell, sp. nov. (Fig. 2).

Spermogonia foliicolae, subepidermalia. Aecidia hypophylla, roestelioidea, tumoribus tumidis insidentia, 1–2 mm. alta, 0.25–0.5 mm. lata; cellulae peridii elongatae, hyalinae, pariete interiore spinulosae, mar-

ginibus et pariete exteriori gradatim plus breviter spinulosae, 12.8–18.2 \times 80–120 μ , plus minusve 15.2 \times 102 μ ; aecidiosporae globosae, pallide brunneae, leves, 19.2–22.4 \times 20.8–24.0 μ , plus minusve 20.8 \times 22.6 μ .

Hab. in foliis *Mali Sieboldii* (Reg.) Rehd. in China. Ex Herb. G. Lagerheim, Botaniska Andelning Riksmuseet, Stockholm, Sweden (Smith, no. 4221).

The material from which this species is described was collected by Smith at Karlong, Szechuan, China, altitude 3200 m., Aug. 27, 1922. The specific name is suggested by the smooth surface of the aeciospore wall, a character of rare occurrence in this genus of rusts.

Comparatively few species of *Gymnosporangium* have so far been described from Asia. One feature common to them, generally speaking, is the occurrence of spinulose embossments on the peridial cells of the aecia. Among the American species this feature is found in *G. exiguum* Kern only.

The specimens which now become the types of *Gymnosporangium magnum* and *G. leve* were loaned from the Herbarium of the Naturhistoriska Riksmuseet, Stockholm, Sweden, through the courtesy of Professor Dr. Gunnar Samuelsson.

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